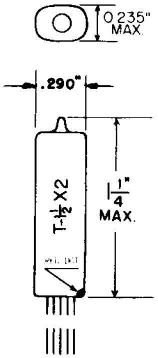
TUNG-SOL



GLASS BULB

DOT IS ADJACENT TO LEAD 1

PENTODE

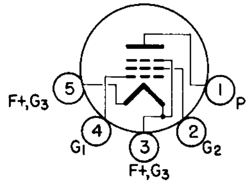
SUBMINIATURE TYPE

FILAMENT

1.25 ± .25 VOLTS 10 MA.

AC OR DC

ANY MOUNTING POSITION



BOTTOM VIEW A

0.016" TINNED
FLEXIBLE LEADS
0.040" CENTER-
TO-CENTER

IN LINE

THE 6418 IS A FILAMENT TYPE PENTODE OF SUBMINIATURE CONSTRUCTION DESIGNED FOR USE AS A POWER AMPLIFIER IN PORTABLE AND WEARABLE EQUIPMENT. THE FLEXIBLE LEADS MAY BE SOLDERED OR WELDED DIRECTLY TO THE TERMINALS OF CIRCUIT COMPONENTS WITHOUT THE USE OF SOCKETS. STANDARD SUBMINIATURE SOCKETS MAY BE USED BY CUTTING THE LEADS TO A SUITABLE LENGTH.

RATINGS

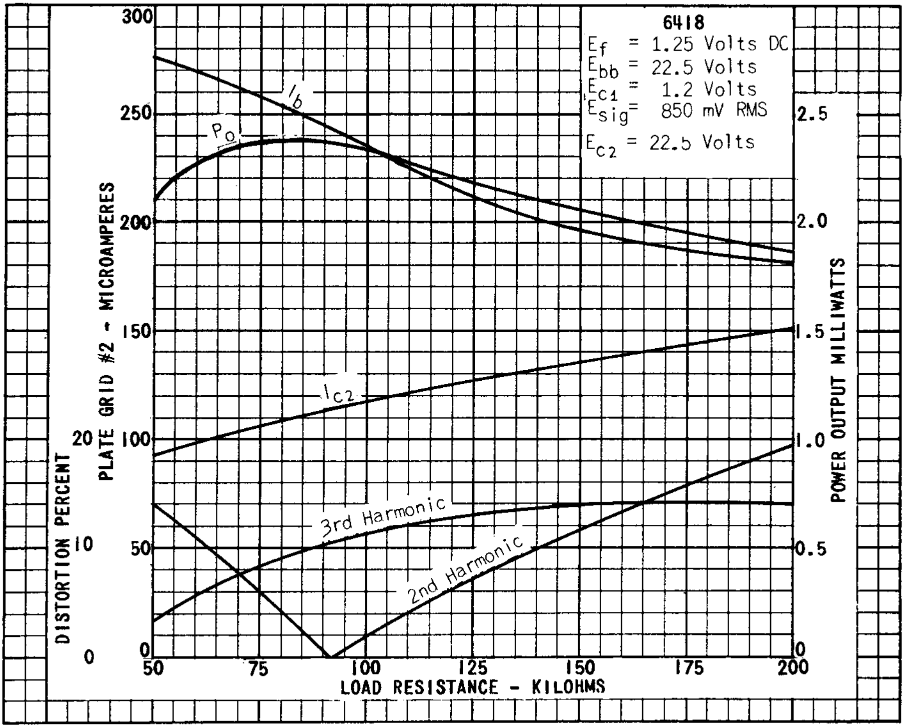
ABSOLUTE MAXIMUM VALUES

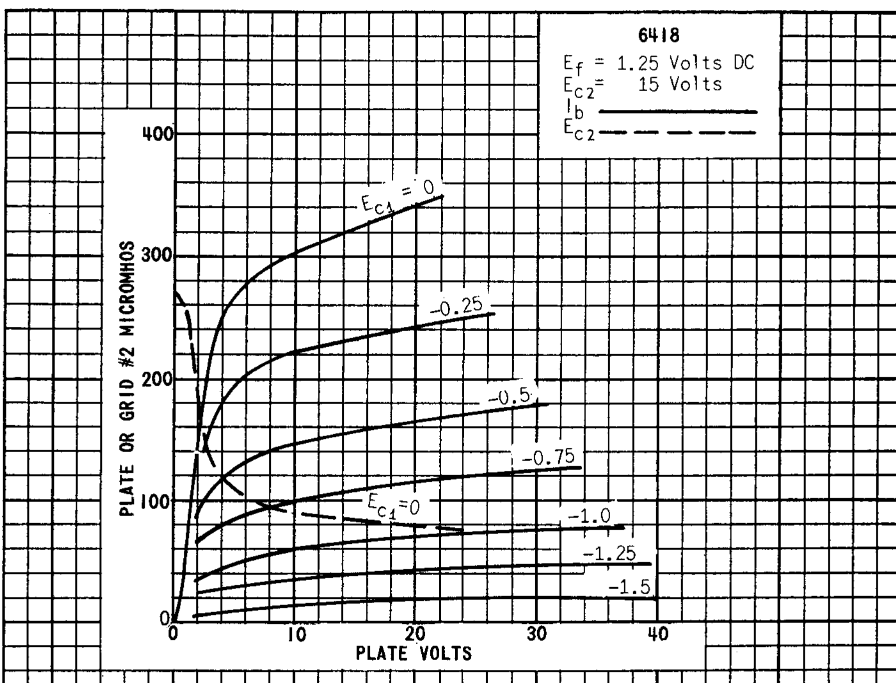
FILAMENT VOLTAGE	1.25±20%	VOLTS
MAXIMUM PLATE VOLTAGE	30	VOLTS
MAXIMUM GRID #2 VOLTAGE	30	VOLTS
MAXIMUM CATHODE CURRENT	0.5	MA.

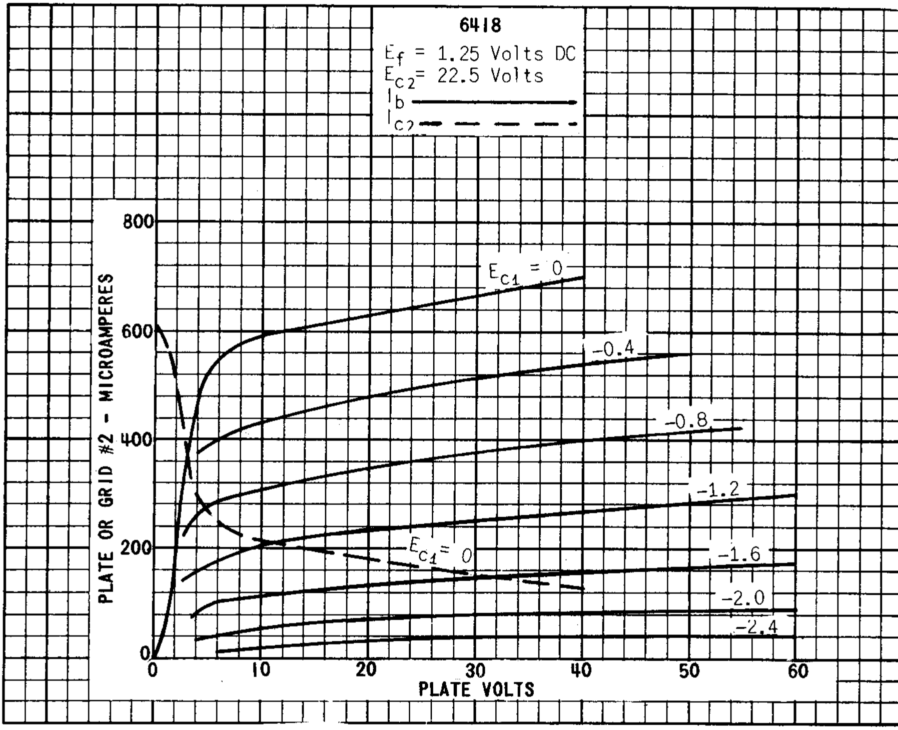
CHARACTERISTICS AND TYPICAL OPERATION - CLASS A AMPLIFIER

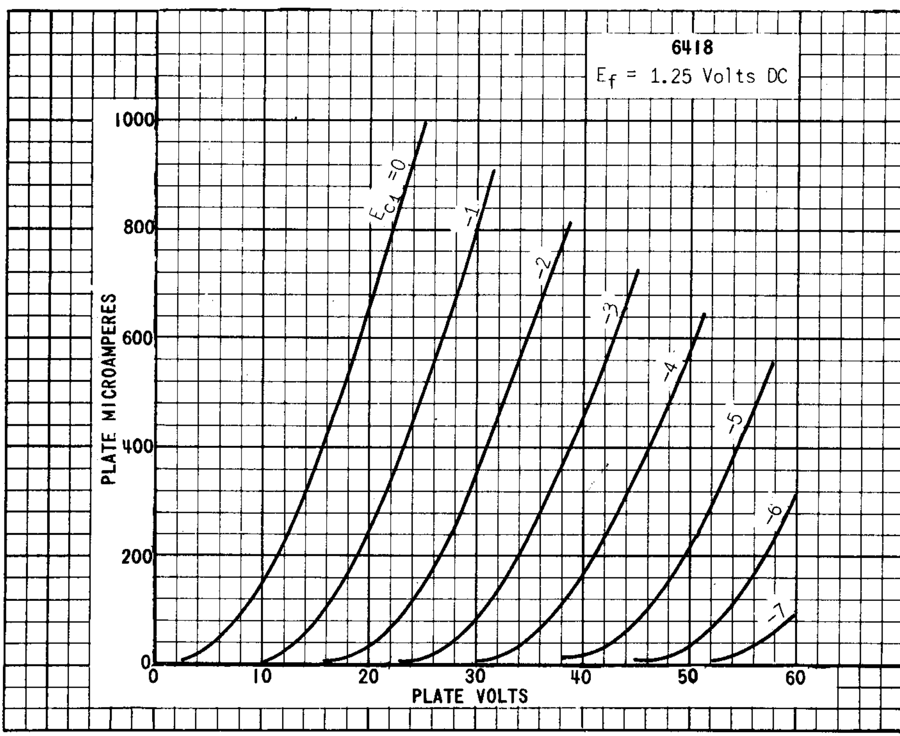
FILAMENT VOLTAGE	1.25	1.25	VOLTS
FILAMENT CURRENT	.01	.01	AMP.
PLATE VOLTAGE	15	22.5	VOLTS
GRID #2 VOLTAGE	15	22.5	VOLTS
GRID #1 VOLTAGE	−0.8	−1.2	VOLTS
ZERO-SIGNAL PLATE CURRENT.	100	240	μA.
ZERO-SIGNAL GRID #2 CURRENT	25	60	μA.
PEAK AF GRID #1 VOLTAGE	0.8	1.2	VOLTS
TRANSCONDUCTANCE	190	300	μMHOS
PLATE RESISTANCE	0.72	0.42	MEGOHMS
LOAD RESISTANCE	150	100	KILOHMS
TOTAL DISTORTION (APPROX.)	12	12	PERCENT
POWER OUTPUT	0.6	2.2	MW.

A
GRID #3 IS COMPOSED OF TWO DEFLECTOR PLATES, ONE BEING CONNECTED TO LEAD 3 AND THE OTHER TO LEAD 5.


6418
E_f = 1.25 Volts DC
E_{bb} = 22.5 Volts
E_{c1} = 1.2 Volts
E_{sig} = 850 mV RMS
E_{c2} = 22.5 Volts
I_b
P_o
I_{c2}
3rd Harmonic
2nd Harmonic
PLATE GRID #2 - MICROAMPERES
DISTORTION PERCENT
POWER OUTPUT MILLIWATTS
LOAD RESISTANCE - KILOHMS
300
250
200
150
100
50
0
20
10
0
2.5
2.0
1.5
1.0
0.5
0
50
75
100
125
150
175
200


6418
E_f = 1.25 Volts DC
E_{c2} = 15 Volts
I_b
E_{c2}
E_{c1} = 0
-0.25
-0.5
-0.75
E_{c1}=0
-1.0
-1.25
-1.5
PLATE OR GRID #2 MICROMHOS
PLATE VOLTS
400
300
200
100
0
0
10
20
30
40


6418
E_f = 1.25 Volts DC
E_{c2} = 22.5 Volts
I_b
I_{c2}
E_{c1} = 0
-0.4
-0.8
-1.2
-1.6
-2.0
-2.4
E_{c1} = 0
PLATE OR GRID #2 - MICROAMPERES
800
600
400
200
0
0
10
20
30
40
50
60
PLATE VOLTS


6418
E_f = 1.25 Volts DC
E_{c1} =0
-1
-2
-3
-4
-5
-6
-7
PLATE MICROAMPERES
1000
800
600
400
200
0
0
10
20
30
40
50
60
PLATE VOLTS